

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO. FILING DATE		LING DATE	FIRST NAMED INVENTOR MITSUJI MARUMO	ATTORNEY DOCKET NO. 35.G2504	CONFIRMATION NO. 8003
09/450,680	11/30/1999				
5514	7590	08/13/2003			
		LA HARPER &	EXAMINER		
-	30 ROCKEFELLER PLAZA NEW YORK, NY 10112			RAO, SHRINIVAS H	
			•	ART UNIT	PAPER NUMBER
				2814	
				DATE MAILED: 08/13/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

¥			<u> </u>
•		Application N .	Applicant(s)
		09/450,680	MARUMO, MITSUJI
C	Offic Action Summary	Examiner	Art Unit
		Steven H. Rao	2814
	MAILING DATE of this communication	n appears on the c ver sheet w	vith the correspondence address
Period for Re	•		AONTH(S) EDOM
THE MAIL - Extensions after SIX (6) - If the period - If NO period - Failure to re - Any reply re earned pate	ENED STATUTORY PERIOD FOR RING DATE OF THIS COMMUNICATION of time may be available under the provisions of 37 Communication of the major of time may be available under the provisions of 37 Communication of the major of the maj	ON. CFR 1.136(a). In no event, however, may a on. In a reply within the statutory minimum of this period will apply and will expire SIX (6) MO statute, cause the application to become A	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).
Status		07.14	
<i>'</i> —	sponsive to communication(s) filed or		
	·	This action is non-final.	
	ce this application is in condition for a sed in accordance with the practice u		atters, prosecution as to the merits is .D. 11, 453 O.G. 213.
Disposition o			
4)⊠ Clai	m(s) <u>23-37</u> is/are pending in the app	lication.	
4a) (Of the above claim(s) is/are wit	thdrawn from consideration.	
5)∏ Clai	m(s) is/are allowed.		
6)∐ Clai	m(s) <u>23-37</u> is/are rejected.		
7) Clai	m(s) is/are objected to.		
	m(s) are subject to restriction a	and/or election requirement.	
Application P	•	·	
, —	specification is objected to by the Exa		the Everiner
	drawing(s) filed on is/are: a)		
-	plicant may not request that any objection proposed drawing correction filed on		
	pproved, corrected drawings are required		didapproved by the Examinor.
	path or declaration is objected to by the		
<i>,</i> —	r 35 U.S.C. §§ 119 and 120		
•	nowledgment is made of a claim for fo	oreign priority under 35 U.S.C.	& 119(a)-(d) or (f).
,	l b) Some * c) None of:	orong in princincy united the circles	3
۵/كــــ/ ۱. [-		ments have been received	
2.			Application No
3.			
_	application from the Internation he attached detailed Office action for	nal Bureau (PCT Rule 17.2(a))	
14) Ackno	owledgment is made of a claim for do	mestic priority under 35 U.S.C	c. § 119(e) (to a provisional application
•	The translation of the foreign languagowledgment is made of a claim for do		
Attachment(s)			
2) D Notice of D	References Cited (PTO-892) Praftsperson's Patent Drawing Review (PTO-94 In Disclosure Statement(s) (PTO-1449) Paper N	48) 5) Notice o	v Summary (PTO-413) Paper No(s) If Informal Patent Application (PTO-152)

Art Unit: 2814

Response to Amendment

Applicants' amendment filed on May 27, 2003 has been entered on May 29, 2003.

Therefore claims 22-37 as recited in the amendment are currently pending in the Application.

Claims 1-21 have been cancelled by the amendment.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 28 to 37 are rejected under the second paragraph of 35 U.S.C. 112 for failing to particularly pointing out and distinctly claim the applicants' invention.

Claims 28 and 36 recite "processing system". It is not understood what is included/excluded by the recitation "processing system". Further the Applicant's specification and prior art do not clarify what Applicants' intend to include/exclude by the recitation "processing system".

Dependent claims 29-35 and 37a re rejected at least for depending upon rejected independent claims 28 and 35.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2814

· •

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 21-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPR (Applicants' Admitted Prior Art) in view of Drake et al. (U. S. Patent No. 5,006,760, herein after Drake).

With respect to claim 21, AAPR describes a pod, which has walls and a lid for an opening formed by said walls, and is capable on including a substrate, the pod comprising :

AAPR does not specifically mention an electromagnetic shield member provided by said walls .

However Drake in figures 1 and col. 2 lines 25-31 describes an electromagnetic shield to forma on outer surface that protects the wafer inside from electromagnetic radiation.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Drake's pod including an electro magnetic shield in AAPR's device to form an outer surface that protects the wafer inside from electromagnetic radiation.

The other limitations of claim 22 are:

A flange provided around the opening which is to contact an electro-magnetic shielded (sic. shield) chamber for processing the substrate (Drake figure 1 # 17, col. 2 lines 33-35), at a portion around an opening covered with a lid of the electromagnetic shield chamber (Drake figure 1) and causes said electromagnetic shield member to be

Art Unit: 2814

grounded through the electromagnetic shield chamber. (Drake figure 1, col. 2 lines 33-35, flange 17 contacts ground 26 through shield 27).

The limitations, "Which is in contact an electromagnetic shield chamber for processing the substrate" and "and causes said electromagnetic shield member to be grounded through the electromagnetic shielded chamber " is a product by process limitation recited in a device claim and therefore cannot be given patentable weight

It is well settled law that a product by process claim is directed to the product per se, no matter how actually made . See In re Fessman, 180 USPQ 324, 326 (CCPA 1974); In re Marosi et al. 218 USPQ 289, 292 (Fed. Cir 1983) all of which make it clear that it is the patentability of the final structure of the product gleaned from the process steps, which must be determined in a product by process claim, and not he patentability of the process. See Also MPEP 2113. More ever an old or obvious product produced by a new method is not a patentable product, whether claimed in " product by process" claims or not.

With respect to claim 23, wherein said lid of said pod is arranged in front of the pod. (AAPR spec. pages 2 lines 29 to page 3 line 12)

With respect to claim 24 wherein said lid of said pod is arranged in a bottom bottom of the pod. (AAPR spec. pages 2 lines 29 to page 3 line 12)

With respect to claim 25 wherein said electromagnetic shield comprises wire mesh provided on or within walls of said pod. (AAPR spec. page 3 lines 21-22).

Art Unit: 2814

With respect to claim 26,34 wherein said electromagnetic shield comprises metal coatings provided on walls of said pod. (AAPR spec. page 3 lines 17-18, inherent instead of the shielded metal covering metal coating can be used).

With respect to claims 28 and 35, to the extent understood, AAPR describes a micro-device manufacturing apparatus using a substrate comprising: an electromagnetic shielded chamber having an opening covered with a door; (AAPR figure 10) a door opener which opens the door of said shielded chamber; (AAPR fig. 10 # 100, spec. page 2 line 8) and a processing system, contained in said shielded chamber, which processes the substrate in said shielded chamber; (APPR #s 6-11 and 39) and a stand for mounting a pod ,AAPR figure 10 # 12 etc.) wherein said pod has walls and a lid for an opening formed by said walls, and is capable of including the substrate, (AAPR figure 10) said pod comprising: the electromagnetic shield member provided by said walls and a flange provided around the opening which is to contact an electro-magnetic shielded (sic. shield) chamber for processing the substrate (Drake figure 1 # 17, col. 2 lines 33-35), at a portion around an opening covered with a lid of the electromagnetic shield chamber (Drake figure 1) and causes said electromagnetic shield member to be grounded through the electromagnetic shield chamber. (Drake figure 1, col. 2 lines 33-35, flange 17 contacts ground 26 through shield 27).

The same rejection as stated under claim 22 above and incorporated here by reference, the additional element of a processing system in the chamber (AAPR page 3 lines 10-12, wherein the wafers are exposed).

Art Unit: 2814

With respect to claim 29 wherein pod further including a flange, wherein when said pod is installed in the shielded chamber, the flange touches the shielded chamber on the surface. (Drake fig. 1 # 13 touching 25).

With respect to claims 30 and 37, wherein the processing chamber exposes the substrate to radiation. (AAPR spec. page 1 lines 16-17, for exposing wafer with radiation is a product by process and therefore no patentable weight can be given).

With respect to claims 31 and 32, wherein the pods are front opening type and bottom opening type (AAPR page 3 lines 4 to 6) (AAPR page 2 lines 30-33).

B. Claims 27 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPR (Applicants' Admitted Prior Art) and Drake et al. (U.S. Patent No. 5,006,760, herein after Drake) as applied to claims 22-26 etc. above and further in view of Akagawa (U.S. Patent No. 4,856,904 herein after Akagawa).

With respect to claims 27 and 35 wherein said electromagnetic shield comprises shielding materials provided in walls of said pod.

AAPR and Drake do not specifically mention shielding materials provided in walls of the pod.

However, Akagwa fig.2 # 46, 47 and col.2 line 64 and col. 6 lines 64-68 describes shielding materials provided in walls of the pod to provide shield materials in intermetant unspecified locations to reduce the electromagnetic leakage and provide a lighter (less weight) shield.

Art Unit: 2814

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Akagwa's shielding materials provided in walls of the pod to provide shield materials in intermetant unspecified locations to reduce the electromagnetic leakage and provide a lighter (less weight) shield.

Response to Arguments

Applicant's arguments filed 5/29/03 have been fully considered but they are not persuasive because as shown above all the presently recited limitations are taught by the applied prior art.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Steven H. Rao whose telephone number is (703) 306-5945. The examiner can normally be reached on Monday- Friday from approximately 7:00 a.m. to 5:30 p.m.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956. The Group facsimile number is (703) 308-7724.

Steven H. Rao

Patent Examiner

February 14, 2003.

LONG PHAM
PRIMARY EXAMINER